

**PATENT**  
**ATTORNEY DOCKET NO.: KCX-490A(17637A)**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS AND INTERFERENCES**

Appellants: Abba et al.	)	Examiner: Jacqueline F. Stephens
	)	
Appl. No.: 10/029,111	)	T.C./A.U.: 3761
	)	
Filed: December 21, 2001	)	Deposit Acct. No.: 04-1403
	)	
Title: TEXTURE AIRLAID MATERIALS	)	Confirmation No.: 2883
	)	
	)	Customer No.: 22827

Mailstop Appeal Brief - Patents  
Honorable Commissioner for Patents  
U.S. Patent and Trademark Office  
Post Office Box 1450  
Alexandria, VA 22313-1450

**BRIEF ON APPEAL**

Honorable Commissioner:

Appellants submit the following brief on appeal in accordance with 37 C.F.R. § 41.37:

**1. REAL PARTY IN INTEREST**

The real party in interest in this matter is the assignee of record, Kimberly-Clark Worldwide, Inc.

**2. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences known to the Appellants or the Appellants' legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**3. STATUS OF CLAIMS**

Claims 1-47 are pending in this application, including independent claims 1, 28, and 47. All the claims are attached hereto in the Claims Appendix.

In the Final Office Action of May 18, 2006, all of the pending claims were finally rejected under 35 U.S.C. §103(a).

**4. STATUS OF AMENDMENTS**

To the Appellants' knowledge, all amendments have been entered into the record.

**5. SUMMARY OF CLAIMED SUBJECT MATTER**

In general, the present application is directed to a texture airlaid web. The textured web is formed on a three-dimensional fabric under sufficient force to cause the web to conform to the surface of the fabric. Abstract. The textured web includes, on a minute scale, peak areas and valley areas. Id. The peak areas and valley areas can improve the liquid handling properties of the web. Id. For instance, webs can be produced having improved absorbency characteristics and/or wicking characteristics.

Id.

Independent claim 1, for instance, is directed to a textured airlaid fibrous web comprising natural fibers, synthetic fibers, or mixtures thereof. The airlaid web is formed on a three-dimensional fabric under sufficient force to cause the web to conform to the surface of the fabric. The textured web includes a repeating pattern of peaks and valleys and has a height that is at least 25% greater than the average caliper of the web. The airlaid web is bonded together with the peaks made of the same material as

the valleys such that the percentage of composition of material making up the peaks is the same as the percentage of composition of material making up the valleys.

Independent claim 28 is directed to an airlaid fibrous web comprising at least one textured surface. The textured surface includes peak areas and valley areas with the peak areas forming a repeating pattern on the surface of the web. The airlaid web has a height that is at least 25% greater than the average caliper of the web with the web including at least one peak area per inch in one direction of the web. The airlaid web is bonded together with the peaks made of the same material as the valleys such that the percentage of composition of material making up the peaks is the same as the percentage of composition of material making up the valleys.

Independent claim 47 is directed to a textured airlaid fibrous web comprising natural fibers, synthetic fibers, or mixtures thereof. The airlaid web is formed on a three-dimensional fabric under sufficient force to cause the web to conform to the surface of the fabric. The textured web includes a repeating pattern of peaks and valleys and has a height that is at least 25% greater than the average caliper of the web. The web includes at least 5 peak areas per inch in one direction of the web and at least 9 peak areas per square inch. The airlaid web is bonded together and has a basis weight of at least 40 gsm with the peaks made of the same material as the valleys such that the percentage of composition of material making up the peaks is the same as the percentage of composition of material making up the valleys.

**6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

In the Final Office Action, independent claims 1, 28, and 47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,990,377 to Chen et al.<sup>1</sup>

**7. ARGUMENT**

Appellants respectfully submit that the presently pending claims are patentable over the cited references.

**I. Independent claims 1, 28, and 47 are patentably distinct over U.S. Patent No. 5,990,377 to Chen et al.**

Chen et al. is directed to a dual-zoned absorbent web. However, Chen et al. completely fails to disclose or suggest certain limitations of Appellants' pending claims. It is respectfully submitted that Chen does not disclose or render obvious a textured airlaid fibrous web in which the percentage of composition of material that makes up the peaks is the same as the percentage of composition of material that makes up the valleys. In addition, as indicated in the Office Action, Chen et al. does not disclose that the web height is at least 25% greater than the average caliper of the web. Final Office Action, pg. 4. Nevertheless, Chen et al. was cited in an attempt to render obvious claims 1, 28, and 47.

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<sup>1</sup> Chen et al. and the present application were both subject to assignment to Kimberly-Clark Worldwide, Inc. at the time the invention was made. The files of the present application refer to an assignment recorded in the PTO at Reel and Frame Nos. 013163/0242 to Kimberly-Clark Worldwide, Inc. Likewise, Chen et al. was also formally assigned to Kimberly-Clark Worldwide, Inc. The present application is a continuation-in-part of U.S. Patent Application Serial No. 09/684,039 and U.S. Patent Application Serial No. 09/680,719, both filed October 6, 2000, both incorporating Chen et al. by reference, and both claiming priority to a Provisional application having Serial No. 60/159,629 filed October 14, 1999. To the extent that the claimed invention is disclosed in U.S. Patent Application Serial No. 09/684,039, U.S. Patent Application Serial No. 09/680,719, and U.S. Provisional Application Serial No. 60/159,629, Chen et al. may not be available as prior art to the presently pending claims. However, WO 1998/042289 which published on October 1, 1998 claims priority to Chen et al. As such, for the purposes of this Appeal, Appellant's arguments are germane to both U.S. Patent No. 5,990,377 and WO 1998/042289.

**A. Chen et al. teaches away from the percentage of composition of material making up the peaks being the same as the percentage of composition of material making up the valleys.**

The Federal Circuit has several times expressly addressed the issue of how to evaluate an alleged case of *prima facie* obviousness to determine whether it has been properly made. For instance, “a *prima facie* case of obviousness can be rebutted if the applicant can show that the art in any material respect taught away from the claimed invention.” In re Haruna, 249 F.3d 1327, 1335 (Fed. Cir. 2001), citing In re Geisler, 116 F.3d 1465, 1469 (Fed. Cir. 1997). A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994). Furthermore, a “prior art reference must be considered in its entirety, ie., as a whole, including portions that would lead away from the claimed invention.” MPEP §2141.02, W.L. Gore & Associates v Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983).

In this regard, Independent claims 1, 28, and 47 of the present application call for the percentage of composition of material that makes up the peaks to be the same as that of the valleys. Specifically, the claims state that “the percentage of composition of material making up the peaks is the same as the percentage of composition of material making up the valleys.” In Chen et al., the percentages of composition are different between the peaks and valleys. Indeed, if Chen et al. were modified so that the percentage of composition of material making up the upper most portions 3 was the same as the percentage of composition of material making up the depressed regions 4 the entire purpose of Chen et al. and its principle of operation would be frustrated.

Chen et al. is specifically directed towards an improved web that provides a clean, dry feel of the skin of the wearer and also allows for rapid depth wide transport of liquid through the web into an underlying absorbent core. Chen et al., Col. 2, lines 19-25. Chen et al. seeks to achieve this goal by having the upper most regions 3 include a greater percentage of composition of hydrophobic matter than the depressed regions 4. In this manner, liquid will be removed from the upper most regions 3 and transported therefrom so as to provide a dry touch or dry feel to the upper most regions 3. If the depressed regions 4 included the same amount of hydrophobic material as the upper most regions 3, liquid would be repelled therefrom and would potentially be transported back to the upper most regions 3 or onto the skin of the wearer.

Chen et al. explicitly states that the depressed regions 4 should have a "significantly" lower amount of hydrophobic matter in order to achieve the stated goals of the reference. In contrast, all of the pending claims of Appellants' application call for the peaks and valley to have the same percentage of composition of material in their make up. All of Appellants' pending claims call for a web that performs and operates differently than that in Chen et al. because they do not call for a web in which a "significantly" lower amount of hydrophobic amount may be present in the valleys while a greater amount of hydrophobic matter is present in the peaks. Thus, it is respectfully submitted that all of the pending claims patentably define over Chen et al..

The Examiner states that the base sheet 1 in Figure 12 of Chen et al. comprises peaks and valleys formed of the same material and the "addition of fibrous material on the peaks creates greater density on the peaks." Final Office Action, pg. 4. Nonetheless, the Examiner argues that the "language used in the independent claims is

inclusive or open-ended and does not exclude additional unrecited elements, compositional components, or steps." However, the language in the claims specifically calls for the peaks to be made of the same material as the valleys and for the percentage of composition of ***material making up the peaks*** to be the same as the percentage of composition of ***material making up the valleys***. In this regard, the "addition of fibrous material on the peaks" as described by the Examiner as being described in Chen et al. constitutes a different composition of material ***making up the peaks*** than the composition of material ***making up the valleys***. This statement, further confirms that Chen et al. teaches away from the presently pending claims.

**B. Even if considered, Chen et al. still fails to teach or suggest all of the limitations of independent claims 1, 28, and 47.**

As indicated in the Office Action, Chen et al. does not disclose that the web height is at least 25% greater than the average caliper of the web, as required by all of the pending claims. Final Office Action, pg. 4. With respect to the height of the web, Appellants note that it is improper to use a patent applicant's own specification to provide the only suggestion for modifying the prior art. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art. Thus, the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. Plainly, the Examiner's only incentive or motivation for so modifying Chen et al. in the manner suggested in the Office Action results from using Appellants' disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in

the prior art, which is improper under 35 U.S.C. § 103. Accordingly, it is respectfully submitted that any such modification of the cited references relies on the impermissible use of hindsight, which cannot be successfully used to support a prima facie case of obviousness.

However, while citing In re Aller, 105 USPQ 233, the Examiner stated that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the claimed relationship between the web height and web caliper since where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.” In re Aller stands for the principle that the discovery of an optimum value of a variable in a known process is normally obvious. In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8-9 (CCPA 1977). Here, the relationship between web height and average caliper of the web would not have been obvious. In order to render the presently pending claims obvious, Chen et al. must teach or suggest to one having ordinary skill in the art the desirability of modifying Chen et al. so as to achieve the structure set forth in Appellants’ pending claims. Again, only through improper hindsight analysis with the benefit of having Appellants’ disclosure could one have thought to modify Chen et al. so that the web height is 25% greater than the average caliper of the web. As such, the presently pending claims patentably define over the Chen.

**C. Chen et al. fails to teach or suggest the limitations of dependent claims 2-27 and 29-46.**

Appellants also respectfully submit that for at least the reasons indicated above relating to corresponding independent claims, the pending dependent claims patentably define over the references cited. However, Appellants also note that the patentability of

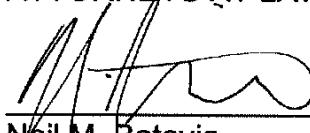
the dependent claims certainly does not hinge on the patentability of independent claims. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

**8. CONCLUSION**

In conclusion, it is respectfully submitted that the claims are patentably distinct over the prior art of record and that the present application is in complete condition for allowance. As such, Appellants respectfully request issuance of the patent.

Respectfully submitted,

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Date

**9. CLAIMS APPENDIX**

1. A textured airlaid fibrous web comprising natural fibers, synthetic fibers, or mixtures thereof, said airlaid web being formed on a three-dimensional fabric under sufficient force to cause the web to conform to the surface of the fabric, the textured web including a repeating pattern of peaks and valleys, the textured web having a height that is at least 25% greater than the average caliper of the web, the airlaid web being bonded together, wherein the peaks are made of the same material as the valleys such that the percentage of composition of material making up the peaks is the same as the percentage of composition of material making up the valleys.
2. A textured airlaid web as defined in claim 1, wherein the airlaid web is thermally bonded together.
3. A textured airlaid web as defined in claim 2, wherein the web contains binder fibers that thermally bond the web together.
4. A textured airlaid web as defined in claim 1, wherein the web is bonded together by applying an adhesive to the surfaces of the web.
5. A textured airlaid web as defined in claim 1, wherein the web is bonded together thermally and through the use of an adhesive.
6. A textured airlaid web as defined in claim 1, wherein the peaks contained within the repeating pattern have a higher density than the valleys.
7. A textured airlaid web as defined in claim 6, wherein the density of the peaks is at least 25% greater than the density of the valleys.
8. A textured airlaid web as defined in claim 1, wherein the web has a basis weight of from about 40 gsm to about 1500 gsm.

9. A textured airlaid web as defined in claim 1, wherein the web includes at least 1 peak per inch in one direction of the web.
10. A textured airlaid web as defined in claim 1, wherein the web includes at least 5 peaks per inch in one direction of the web.
11. A textured airlaid web as defined in claim 1, wherein the web includes at least 10 peaks per inch in one direction of the web.
12. A textured airlaid web as defined in claim 1, wherein the peaks are present in at least two directions on the web, the peaks being present in an amount of at least 2 peaks per square inch.
13. A textured airlaid web as defined in claim 12, wherein the peaks are present in an amount of at least 9 peaks per square inch.
14. A textured airlaid web as defined in claim 1, wherein the web has a surface area that is at least 50% greater than the surface area of a planar web made from the same fibers at the same basis weight.
15. A textured airlaid web as defined in claim 1, wherein the web has a surface area that is at least 100% greater than the surface area of a planar web made from the same fibers at the same basis weight.
16. A textured airlaid web as defined in claim 1, wherein the web is further contoured to have a preselected overall shape.
17. A textured airlaid web as defined in claim 1, wherein the web includes a first surface and a second and opposite surface, the first surface defining the pattern of peaks and valleys, the second surface comprising a substantially planar surface.

18. A textured airlaid web as defined in claim 1, wherein the web includes a first surface and a second surface, the first surface including a first pattern of peaks and valleys, the second surface including a second pattern of peaks and valleys.

19. A textured airlaid web as defined in claim 1, wherein the airlaid web is multi-layered.

20. A textured airlaid web as defined in claim 1, wherein the textured web has a height that is at least 50% greater than the average caliper of the web.

21. A medical absorbent product containing the textured airlaid web as defined in claim 1.

22. A diaper containing the textured airlaid web as defined in claim 1.

23. A feminine hygiene product containing the textured airlaid web as defined in claim 1.

24. An adult incontinence product containing the textured airlaid web as defined in claim 1.

25. A wiper product containing the textured airlaid web as defined in claim 1.

26. A training pant containing the textured airlaid web as defined in claim 1.

27. A textured airlaid web as defined in claim 1, further containing an additive selected from the group consisting of a super-absorbent material, an odor absorbent material, a scented material, an anti-microbial agent, and mixtures thereof.

28. An airlaid fibrous web comprising at least one textured surface, the textured surface including peak areas and valley areas, the peak areas and the valley areas

forming a repeating pattern on the surface of the web, the airlaid web having a height that is at least 25% greater than the average caliper of the web, the web including at least one peak area per inch in one direction of the web, the airlaid web being bonded together, wherein the peak areas are made of the same material as the valley areas such that the percentage of composition of material making up the peak areas is the same as the percentage of composition of material making up the valley areas.

29. An airlaid fibrous web as defined in claim 28, wherein the textured surface is formed on a fabric having a three-dimensional surface under sufficient force to cause the web to conform to the three-dimensional surface of the fabric.

30. An airlaid fibrous web as defined in claim 28, wherein the airlaid web is thermally bonded together.

31. An airlaid fibrous web as defined in claim 28, wherein the web is bonded together by applying an adhesive to the surfaces of the web.

32. An airlaid fibrous web as defined in claim 28, wherein the peak areas have a first density and the valley areas have a second density, the first density being at least 25% greater than the second density.

33. An airlaid fibrous web as defined in claim 28, wherein the web includes at least 3 peak areas per inch in one direction of the web.

34. An airlaid fibrous web as defined in claim 28, wherein the web includes at least 5 peak areas per inch in one direction of the web.

35. An airlaid fibrous web as defined in claim 28, wherein the peak areas are present in at least two directions on the web, the peak areas being present in an amount of at least 2 peaks per square inch.

36. An airlaid fibrous web as defined in claim 28, wherein the peak areas are present in at least two directions on the web, the peak areas being present in an amount of at least 9 peaks per square inch.

37. An airlaid fibrous web as defined in claim 28, wherein the textured surface has a surface area that is at least 50% greater than the surface area of said web if said peak areas and said valley areas were planar.

38. An airlaid fibrous web as defined in claim 28, wherein the textured surface has a surface area that is at least 200% greater than the surface area of said web if said peak areas and said valley areas were planar.

39. An airlaid fibrous web as defined in claim 28, further containing an additive selected from the group consisting of a super-absorbent material, an odor absorbent material, a scented material, an anti-microbial agent, and mixtures thereof.

40. An airlaid fibrous web as defined in claim 28, wherein the web includes a substantially planar surface opposite the textured surface.

41. An airlaid fibrous web as defined in claim 28, wherein the airlaid web has a height that is at least 50% greater than the average caliper of the web.

42. An airlaid fibrous web as defined in claim 28, wherein the airlaid web has a height that is at least 100% greater than the average caliper of the web.

43. An airlaid fibrous web as defined in claim 28, wherein the textured surface has a surface area that is at least 400% greater than the surface area of said web if said peak areas and said valley areas were planar.

44. An airlaid fibrous web as defined in claim 28, wherein the airlaid web has a height that is at least 100% greater than the average caliper of the web.

45. An airlaid fibrous web as defined in claim 28, wherein the web consists essentially of synthetic fibers.

46. An airlaid fibrous web as defined in claim 28, wherein the peak areas have a first density and the valley areas have a second density, the first density being at least 100% greater than the second density.

47. A textured airlaid fibrous web comprising natural fibers, synthetic fibers, or mixtures thereof, the airlaid web being formed on a three dimensional fabric under sufficient force to cause the web to conform to the surface of the fabric, the web including a textured surface having a repeating pattern of peak areas and valley areas, the airlaid web having a height that is at least 25% greater than the average caliper of the web, the web including at least 5 peak areas per inch in one direction of the web and including at least 9 peak areas per square inch, the airlaid web being bonded together, the airlaid web having a basis weight of at least 40 gsm, wherein the peak areas are made of the same material as the valley areas such that the percentage of composition of material making up the peak areas is the same as the percentage of composition of material making up the valley areas.

**10. EVIDENCE APPENDIX**

None

**11. RELATED PROCEEDINGS APPENDIX**

None